

IN THE CLAIMS

1. (Original) A process for making quetiapine comprising the step of reacting 11-piperazinyl dibenzo[*b,f*]-[1,4]thiazepine hydrochloride and 2-(2-chloroethoxy) ethanol in a solvent in the presence of a base, and a phase transfer catalyst.
2. (Original) The process of claim 1 wherein the reacting is at reflux temperature.
3. (Original) The process of claim 1 wherein the reacting is performed in the presence of an alkali metal halide.
4. (Original) The process of claim 3 wherein said alkali metal halide is sodium iodide.
5. (Original) The process of claim 1 wherein the phase transfer catalyst is selected from the group consisting of tetrabutylammonium bromide, triethylbenzylammonium chloride, tricaprylmethylammonium chloride and tetrabutylammonium hydroxide.
6. (Original) The process of claim 5 wherein the phase transfer catalyst is tetrabutylammonium bromide.
7. (Original) The process of claim 1 wherein the solvent is a lower alkanol, an aromatic hydrocarbon, or dipolar aprotic solvent, or a mixture of one or more of these.
8. (Original) The process of claim 7 wherein the solvent is *n*-butanol.
9. (Original) The process of claim 7 wherein the solvent is toluene.
10. (Original) The process of claim 7 wherein the solvent is dimethyl formamide.

11. (*Original*) The process of claim 1 wherein the base is selected from the group consisting of an alkali metal and alkaline earth metal oxides, hydroxides, bicarbonates and carbonates.
12. (*Original*) The process of claim 11, wherein said base is sodium carbonate.
13. (*Original*) A process for making quetiapine hemifumarate comprising the steps of:
- a) reacting 11-piperazinyl dibenzo[*b,f*]-[1,4]thiazine hydrochloride and 2-(2-chloroethoxy)ethanol in a solvent in the presence of a base, and a phase transfer catalyst, whereby a first slurry is obtained,
 - b) separating the solid from the first slurry whereby a liquid filtrate is obtained,
 - c) combining the liquid filtrate with fumaric acid, whereby a second slurry is obtained, and
 - d) isolating quetiapine hemifumarate from the second slurry.
14. (*Original*) The process of claim 13 wherein the combination of step c) is heated to a temperature of about 80°C to about 100° C or higher and subsequently cooled to a temperature less than about 100° C, whereby a slurry is obtained.
15. (*Original*) The process of claim 13 wherein the reacting is at a temperature of about 100°C.
16. (*Original*) The process of claim 13 wherein the reacting is performed in the presence of an alkali metal halide.
17. (*Original*) The process of claim 16 wherein said alkali metal halide is sodium iodide.

18. (*Original*) The process of claim 13 wherein the phase transfer catalyst is selected from the group consisting of tetrabutylammonium bromide, triethylbenzylammonium chloride, tricaprylmethylammonium chloride, and tetrabutylammonium hydroxide.
19. (*Original*) The process of claim 18 wherein the phase transfer catalyst is tetrabutylammonium bromide.
20. (*Original*) The process of claim 13 wherein the solvent is a lower alkanol, an aromatic hydrocarbon, or dipolar aprotic solvent, or a mixture of one or more of these.
21. (*Original*) The process of claim 20 wherein the solvent is *n*-butanol.
22. (*Original*) The process of claim 20 wherein the solvent is toluene.
23. (*Original*) The process of claim 20 wherein the solvent is dimethyl formamide.
24. (*Original*) The process of claim 13 wherein the base is selected from the group consisting of an alkali metal and alkaline earth metal oxides, hydroxides, bicarbonates and carbonates.
25. (*Original*) The process of claim 24 wherein the base is sodium carbonate.
26. (*Original*) The process of claim 13 further comprising the step of recrystallizing the isolated quetiapine hemifumarate from a solvent selected from the lower alkanols and mixtures of a dipolar aprotic solvent and water.
27. (*Currently Amended*) The process of claim 26 wherein the lower alkanol is ethanol or ~~isopropanol~~ isopropanol and the dipolar aprotic solvent is dimethyl formamide.

28. *(Original)* In a process for making quetiapine or a pharmaceutically acceptable salt thereof, the step of reacting 11-piperazinyl dibenzo[*b,f*]-[1,4]thiazepine hydrochloride and 2-(2-chloroethoxy)ethanol in a solvent that is a lower alkanol, an aromatic hydrocarbon, or a dipolar aprotic solvent, in the presence of sodium carbonate, sodium iodide, and tetrabutylammonium bromide.

29. *(Original)* The process of claim 28 wherein the pharmaceutically acceptable salt is the hemifumarate.

30. *(Original)* A process for making quetiapine comprising the step of reacting, at reflux, 11-piperazinyl dibenzo[*b,f*]-[1,4]thiazepine hydrochloride and 2-(2-chloroethoxy)ethanol in a solvent selected from n-butanol, toluene, and dimethyl formamide, in the presence of sodium carbonate, sodium iodide, and tetrabutylammonium bromide.

31. *(Original)* A process for making quetiapine hemifumarate comprising the steps of:

a) reacting, at reflux, 11-piperazinyl dibenzo[*b,f*]-[1,4]thiazepine hydrochloride and 2-(2-chloroethoxy)ethanol in a solvent selected from n-butanol, toluene, and dimethyl formamide in the presence of sodium carbonate, and tetrabutyl ammonium bromide, whereby a first slurry is obtained,

b) separating the solid from the first slurry whereby a liquid filtrate is obtained,

c) combining the liquid filtrate with fumaric acid,

d) heating the combination to a temperature of about 100°C or higher,

e) subsequently cooling the combination to < 100° C, whereby a second slurry is obtained, and

f) isolating quetiapine hemifumarate from the second slurry.

~~31~~32. *(Currently Amended)* The process of claim ~~30~~ 31 wherein the ~~re~~reacting ~~reacting~~ is carried-out also in the presence of sodium iodide.

~~32~~33. (*Currently Amended*) The process of claim ~~30~~ 31 further comprising the step of recrystallizing the quetiapine hemifumarate isolated in step f) from a solvent selected from the lower alkanol or a mixture of a dipolar aprotic solvent and water.

~~33~~34. (*Currently Amended*) The process of claim 32 wherein the lower alkanol is ethanol or isopropanol and the dipolar aprotic solvent is dimethyl formamide.